



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/371,769	08/10/1999	ERWIN HACKER	514413-3765	9638
20999 7590 06/05/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER PRYOR, ALTON NATHANIEL	
			ART UNIT	PAPER NUMBER
			1616	
			MAIL DATE	DELIVERY MODE
			06/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/371,769	Applicant(s) HACKER ET AL.	
	Examiner Alton N. Pryor	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15, 21-23, 27, 28, 47-58 and 74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-15, 21-23, 27, 28, 47-58, 74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/9/07</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14,15,21-23,27,28,47-58,74 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for combinations comprising glufosinate and salts thereof, does not reasonably provide enablement for combinations comprising glufosinate peptides and glufosinate esters. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Peptides and esters are structurally and functionally different from glufosinate and salts thereof. The differences in structure and functionality may suggest an adverse effect in herbicidal control. In addition, none of the working examples disclose glufosinate peptides and glufosinate esters. Therefore, an artisan would have the undue burden to determine if glufosinate peptides and glufosinate esters are effective.

Response to Applicants' Amendment filed 3/21/07

Applicant has deleted from the instant invention compounds of formula (A1) having Z equal to a peptide radical or other phosphinothricine derivatives of said peptide radical. For this reason the 35 USC 112, 1st paragraph will be withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-15,21-23,27,28,47-58,74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruegg et al (US 6180563; 1/30/01).

Ruegg teaches a method for controlling weeds in crops including cotton comprising applying to the crop a composition comprising trifloxysulfuron plus at least one compound including glyphosate, glufosinate, metolachlor, pyriithobac, sethoxydim, and clethodim. See abstract, column 1 line 5 – column 6 line 35, column 11 line 32 – column 12 line 21. Ruegg does not teach or suggest an explicit method or composition for controlling weed in cotton comprising applying to cotton a composition comprising glyphosate or glufosinate and metolachlor, pyriithobac, sethoxydim, and/or clethodim. However, it would have been obvious to one having ordinary skill in the art to make instant invention comprising trifloxysulfuron plus glyphosate or glufosinate plus metolachlor, pyriithobac, sethoxydim, and/or clethodim. One would have been motivated to do this because Ruegg suggests the combination of ingredients and the herbicidal effectiveness of the combination would have been broaden as a result of the combination.

Applicant provides unexpected results for the above combination of ingredients as shown on pages 31-35 of the specification. However, the unexpected results are shown for specific application rates of each herbicide, e.g. glufosinate at 450 g / ha and metolachlor at 930 g / ha (see Table 3 – Note the specific application rates providing the unexpected results are not in the

claim). On the other hand, the specification recites broad application rate ranges of 50 to 2000 g of glufosinate / ha and 500 to 5000 g / ha of metachlor. See page 7 lines 6-9, page 11 lines 23-25. The board application rate ranges of actives disclosed in the body of the specification makes obvious the claims since the broad application rate ranges of ingredients disclosed in the specification are art recognized.

Response to Applicants' Argument

The Ruegg reference does not recognize a benefit outside of a combination with trifloxysulfuron and the Ruegg reference would not serve as a blue print for the instant invention. Examiner argues that the instant invention employs “comprising” language, which allows the inclusion of trifloxysulfuron. While it is true that Ruegg does not serve as a blue print for anticipating the instant invention, Ruegg does make obvious the instant invention. Ruegg suggests in column 11 line 32 – column 12 line 21 the combination of trifloxysulfuron with at least one specified compound. Note that Ruegg specifically names the at least one compound which includes the instant compounds glufosinate, metolachlor, pyriithiobac, sethoxydim and clethodim. This teaching by Ruegg allows for trifloxysulfuron to be combined with compounds glufosinate, metolachlor, pyriithiobac, sethoxydim and/or clethodim. The combinations of ingredients are not resulting from a mere picking and choosing since the Ruegg specifically names the compounds, which can be combined trifloxysulfuron. In addition it is obvious to combine substances of the same utility with the expectation of at least an additive effect. Note that a prior art reference does not have to recite all the possible combinations of ingredients in order to make an invention obvious.

Art Unit: 1616

Applicants further argue that the combination of glufosinate ammonium and other pesticides (metolachlor or pyriithiobac) yields unexpected results. The Applicants direct Examiner's attention to pages 32-33 of the specification for the unexpected results. The Examiner has studied the data and concludes that data obtained from the combination of glufosinate ammonium (A1.2) plus metolachlor (B1.9) on Echinocloa is not convincing since 88% by solely using B1.9 is only 6% more than the 94% obtained from using the combination of A1.2 plus B1.9. The result obtained from the combination of A1.2 plus pyriithiobac (B2.4) is not convincing since the experimental result of 95% is only 10% greater than the expected result of 85%. The results obtained from the combination of A1.2 plus B1.9 on Datura Stramonium is convincing because the experimental results was 97% instead of the expected 75%, i.e. the experimental result was more than 20% greater than the expected result. Applicants provide no unexpected results for the combination of known herbicide, sethoxydim or clethodim, with glufosinate-ammonium, which is also a known herbicide.

Status of Claim 13

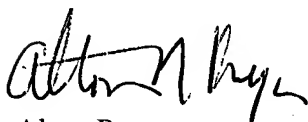
Note, independent method of use claim 13 was inadvertently left out of the 35 USC 103(a) rejection; however, it is obvious that independent claim 13 from which rejected claims 14,15,21-23,27,28 depend should have been included in the 103(a) rejection. Note, the rejection of claims 14,15,21-23,27,28 will not be valid unless their independent claim 13 is included in this rejection. The art cited must have met the limitation of the independent claim 13 in order to make the rejection of the dependent claims 14,15,21-23,27,28 depending from the independent claim valid.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alton Pryor
Primary Examiner
AU 1616